

PROCEEDINGS OF THE ROYAL ENTOMOLOGICAL SOCIETY OF LONDON

SERIES C. JOURNAL OF MEETINGS

VOLUME 17.

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REPORT OF THE COUNCIL, 1952.

In the past year the Society has suffered a particular loss by the death of His Majesty King George VI, who was Patron of the Society. Addresses of Condolence were submitted to Her Majesty Queen Elizabeth II, and to Her Majesty Queen Elizabeth, the Queen Mother, and an expression of loyalty was conveyed to Her Majesty on her accession to the Throne. Council is pleased to be able to report that Her Majesty has graciously consented to become The Patron of the Society.

During the year one Honorary Fellow (Dr. George Ulmer) and 80*(78) Ordinary Fellows have been elected, of whom 63 have paid their Admission Fee. In addition, 7 Fellows elected in 1951 paid the Admission Fee in 1952.

The Society has lost by death two Special Life Fellows (Dr. K. G. Blair and Mr. G. Talbot), and 13 Ordinary Fellows: D. J. Atkinson, J. B. Corporaal, H. S. Fremlin, C. J. Grist, E. Rivenhall Goffe, H. C. Kenway, R. H. Kersey, Mme. A. de Horrack-Fournier, C. H. Kennedy, J. W. Metcalfe, Sir Arthur W. Pickard-Cambridge, R. G. C. C. Sandeman and J. H. Watson.

In addition, 18 Fellows have resigned, namely H. K. Airy Shaw, F. T. Baker, H. J. Craufurd Benson, E. W. Bentley, A. R. Castle, J. W. Cowland, A. Diakonoff, W. J. Dow, G. K. Gregson, S. M. Hanson, S. M. B. Hardwicke, R. I. Lorimer, A. J. Musgrave, A. J. Nicholson, A. F. Rosa, P. P. L. Stevenson, H. H. West, and C. D. L. Wharry, and 9(9) Fellows have been removed from the list in accordance with the Bye-Laws, Chapter XVI, Section 3: P. C. G. Adams, W. W. Baum, H. Bhattacharjee, E. M. Elmhirst, R. B. Freeman, G. Morcos, H. A. Peace, G. C. Taylor and Chao-Seng Tsi.

The Society now consists of 9 Honorary Fellows, 10 Special Life Fellows and 1014 Ordinary Fellows, a total of 1033, and an increase of 30 for the year. It is gratifying to observe that the rapid increase in the Fellowship which began in 1942 has continued in 1952.

The *Transactions* for 1952 (Volume 103) consist of 358 pages and contain 10 papers, of which 3 deal with Homoptera, 2 with Hymenoptera, and 1 each with Plecoptera, Heteroptera, Hemiptera, Lepidoptera and Coleoptera. The volume is illustrated by one half-tone plate and numerous text-figures. The Society is indebted to the Royal Society for a grant towards the cost of publishing the paper by W. D. Hincks.

¹ The numbers in brackets indicate the corresponding figures for 1951.

The *Proceedings* were continued as follows :

- Series A.* Volume 27 consists of 122 pages, and contains 19 papers illustrated by 3 half-tone plates and many text-figures. A contribution was received from the Anti-Locust Research Centre towards the cost of the plates illustrating the paper by Mr. E. J. Evans.
- Series B.* Volume 21 consists of 176 pages, and contains 28 papers illustrated by 3 half-tone plates and numerous text-figures. The Anti-Locust Research Centre defrayed the cost of the plates illustrating the paper by Dr. Dirsh on the genus *Tropidauchen* Saussure (Orthoptera : Acrididae).
- Series C.* A part of *Series C* has been sent to each Fellow in advance of meetings, and a complete volume will be issued with the last part.

Two additional parts of the series of *Handbooks for the Identification of British Insects* have appeared, namely Hymenoptera (Symphyta), Part 2b, by R. B. Benson, and Coleoptera (Cerambycidae), by E. A. J. Duffy. The sale of these *Handbooks* is most satisfactory, at least one-half of the edition of each part being disposed of on publication.

Attendance at the Meetings of the Society has shown a slight increase compared with the previous two years, the average attendance being 97(94). This increase was probably due to the fact that Council decided to cancel the meeting which was due to be held in September, experience having shown that attendance in September tended to be disappointing.

The precedent set by the meeting at Manchester in July, 1951, was followed this year by a most successful meeting on Saturday, 7th June, at Rothamsted Experimental Station. This resulted from the kind invitation of Sir William Gammie Ogg, Director of the Station, and of Dr. C. B. Williams, Head of the Department of Entomology. Perfect weather and admirable organisation by the staff of the Departments of Entomology, Insecticides, Bee Research and Plant Pathology, made this a most enjoyable occasion. The meeting was attended by about 120 Fellows and Guests.

Use of the Library has increased, the number of books borrowed being 1911 compared with 1611 for 1951. The number of borrowers was 929(960). 132 loans were made to the National Central Library. Progress has been made with binding although, in the interests of economy, the amount carried out has been reduced in comparison with the previous year.

Careful consideration has been given during the year to the introduction of a Covenant Scheme whereby Fellows may, if they wish, sign a Covenant binding themselves to pay the annual subscription for seven years. The Society should benefit by the recovery of the income tax paid in respect of their subscriptions by Fellows who sign the Covenant. Certain amendments to the Bye-Laws which were necessary for the introduction of the scheme were made at a Special Meeting held on 5th November, and covenant forms have been sent to all Fellows in Great Britain.

Council has been assisted in dealing with the details of financial, publication and library matters by the recommendations of the Finance and House Committee and the Publication Committee, under the able Chairmanship respectively of Lt.-Col. W. B. L. Manley and Mr. C. T. Gimingham. The vacancy on the Finance and House Committee caused by the death of Col. D. J. Atkinson was filled by Mr. R. F. Avery.

The Society was represented at the British Association Meetings by Professor F. Balfour-Browne and the Editor, Mr. J. Balfour-Browne.

The Committee for the Protection of British Insects has continued to meet under the Chairmanship of Mr. Edelsten. A notice has been published in the British entomological journals asking for the co-operation of Lepidopterists in

the protection of *Sedina buettneri* in the Isle of Wight. The Committee continues to receive information on the progress of other very local species, and to maintain liaison with the various authorities on whose land the species occur, as well as with The Nature Conservancy, The Forestry Commission and The International Union for the Protection of Nature.

Council wishes here to draw attention to the fact that the Committee for the Protection of British Insects administers a Fund which is applied in the interests of the protection of rare species. There is also a Wicken Fen Fund, the income of which is paid annually to the National Trust to assist in the maintenance of Wicken Fen. There are very few subscribers to the Protection Fund, and the Wicken Fen Fund has declined in recent years. It is felt that this is probably due to the fact that these Funds have received little publicity, and it is hoped that mention of the Funds here may lead to an increase in subscribers.

In concluding this Report, your Council feels that, allowing for the financial caution which was judged advisable in view of external conditions, the year 1952 has been one of satisfactory progress in the Society's affairs.

THE ROYAL ENTOMOLOGICAL SOCIETY OF LONDON

STATEMENT OF INCOME AND EXPENDITURE for the Year ended 31st December, 1952.

(Presented at the Annual Meeting, 21st January, 1953.)

GENERAL FUND.

[illegible]

STATEMENT OF INCOME AND EXPENDITURE for the year ended 31st December, 1952.

LIBRARY FUND.

INCOME.				EXPENDITURE.	
1951. £	1951. £	£ s. d.	£ s. d.	£ s. d.	£ s. d.
	To Interest on Investment— Hamilton Druce Bequest Fund ..	..	32 10 0	By New Books Binding, Repairs and Insurance ..	179 3 3
32	" General Fund— Transfer ..	..	..	..	110 7 3
	do. Value of Exchanges ..	..	539 10 6	" Transfer to Sales of Publications— Value of Exchanges ..	289 10 6
793	456	..	438 0 0	" Excess of Income over Expenditure for year carried to Balance Sheet ..	438 0 0
			977 10 6		282 10 0
			<u>£1,010 0 6</u>		<u>£1,010 0 6</u>
			<u>£325</u>		

REPAIRS TO PREMISES FUND.

INCOME.				EXPENDITURE.	
1951. £	1951. £	£ s. d.	£ s. d.	£ s. d.	£ s. d.
	To General Fund—Transfer ..	..	..	Surveyors' Fees in connection with War Damage and Other Repairs ..	..
750		..	400 0 0	Excess of Income over Expenditure for year carried to Balance Sheet ..	400 0 0
			<u>£400 0 0</u>		<u>£400 0 0</u>
			<u>£750</u>		

SPECIAL PUBLICATIONS FUND.

INCOME.				EXPENDITURE.	
1951. £	1951. £	£ s. d.	£ s. d.	£ s. d.	£ s. d.
	To Sales ..	..	44 13 3	By Expenditure on List of Serial Publications ..	..
31	" Excess of Expenditure over Income for year carried to Balance Sheet ..	..	..	Excess of Income over Expenditure for year carried to Balance Sheet ..	44 13 3
50		..	..		<u>£44 13 3</u>
			<u>£44 13 3</u>		
			<u>£81</u>		

HANDBOOKS OF BRITISH INSECTS.

INCOME.				EXPENDITURE.	
1951. £	1951. £	£ s. d.	£ s. d.	£ s. d.	£ s. d.
	To Sales ..	..	..	By Printing ..	444 11 11
427	" Excess of Expenditure over Income over Expenditure for year carried to Balance Sheet ..	..	596 15 8	Excess of Income over Expenditure for year carried to Balance Sheet ..	152 3 9
			<u>£596 15 8</u>		<u>£596 15 8</u>
			<u>£427</u>		

BALANCE SHEET, 31st December, 1952.

LIBRARY FUND.

Sundry Creditors	£	s.	d.	£	s.	d.
EXCESS OF ASSETS OVER LIABILITIES—						
As at 31st December, 1951	1,240	16	3	15	6	6
Add Excess of Income over Expenditure for year to date	282	10	0			
	<u>1,523</u>	6	3			
				£1,538	12	9

REPAIRS TO PREMISES FUND.

EXCESS OF ASSETS OVER LIABILITIES—	£	s.	d.	£	s.	d.
As at 31st December, 1951	1,619	15	7			
Add Excess of Income over Expenditure for Year to date	400	0	0			
	<hr/>			2,019	15	7
Investments at Cost—						
£750 3% War Stock 1955/59						
£627 10% 3% British Transport Stock 1978/88						
(Market Value at date £1,234.)						
Balance at Bank						
Post Office Savings Bank						
Current Account						
	<hr/>			668	15	11
	<hr/>			£2,019	15	7

SPECIAL PUBLICATIONS FUND.

[illegible]

THE HUGH MAIN FUND FOR THE ADVANCEMENT OF ENTOMOLOGY.

EXCESS OF ASSETS OVER LIABILITIES— As at 31st December, 1951

Add Value of Assets representing the balance of
Residue of the Estate of the late Hugh Main
deceased, transferred by the Trustees £9,881 5 10
Less Estate Duty paid by the Society 684 5 10

Income Tax recovered in respect of Dividends and
Interest received by Trustees prior to transfer
of Investments
Interest on Investments for Year

Less Transfer to General Fund Income and Expen-
diture Account—
Interest on Investments

	£	s.	d.	£	s.	d.
	3,498	5	6			
	9,247	0	0			
	82	3	4			
	286	5	8			
	13,113	14	6			
	286	5	8			
	12,827	8	10			
	£12,827	8	10			

TRUST FUNDS.

HAMILTON DRUCE BEQUEST FUND— As at 31st December, 1951

£ s. d.

.. .. . 1,095 15 6

£12,827 8 10

HAMILTON DRUCE BEQUEST— Investments—

£406 3% Savings Bonds 1960-70
£4,000 3% British Electricity Stock 1968/73
£5,000 3% British Electricity Stock 1974/77
£5,312 3s. 7d. 3% British Transport Stock 1978/88
Investment of Cash paid over by Trustees £872 2s. 6d. 2% Consols
(Market Value at date £12,454.)
Income Tax Post War Credit Certificates

£ s. d.

384 0 0

3,596 17 8

4,100 0 0

4,037 4 9

622 12 5

12,740 14 10

86 14 0

£12,827 8 10

Balance at Bank—
Post Office Savings Bank
WESTWOOD BEQUEST—
Investment at Cost—
£239 12s. 4d. Birmingham Corporation 3% Stock, 1947
(Market Value at date £159.)

£ s. d.

66 19 6

1,095 15 6

250 0 0

£1,345 15 6

WESTWOOD BEQUEST FUND— As at 31st December, 1951

(Sgd.) N. E. HICKIN, Hon. Treasurer.

We have examined the foregoing Balance Sheets and Accounts with the Books and Vouchers of the Society, and certify them to be in accordance therewith. We have verified the Investments and Bank Balances and the Solicitors have certified to us that they hold the Deeds of No. 41, Queens Gate for safe custody on behalf of the Society.

Finbury Circus House,
Blomfield Street,
London, E.C.2.

14th January, 1953.

(Sgd.) W. B. KEEN & Co.,
Chartered Accountants.

COMMITTEE FOR THE PROTECTION OF BRITISH INSECTS.
 RECEIPTS AND PAYMENTS ACCOUNT for the year ended 31st December, 1952.

RECEIPTS.			PAYMENTS.		
	£	s. d.		£	s. d.
To Balance at Bank 1st January, 1952	By Expenditure on Preservation of <i>Lygaea dispar batavius</i>	..	..
Donations	Balance at Bank 31st December, 1952 ..	..	..

(Sgd.) H. M. EDELSTEN, *Hon. Treasurer.*

We have audited the above Account of Receipts and Payments and certify it to be correct.

*Finbury Circus House,
 Blomfield Street,
 London, E.C.2.
 14th January, 1953.*

(Sgd.) W. B. KEEN & Co., *Chartered Accountants.*

WICKEN FEN FUND.

RECEIPTS AND PAYMENTS ACCOUNT for the year ended 31st December, 1952.

RECEIPTS.				PAYMENTS.			
		£	s. d.			£	s. d.
To Balance at Bank 1st January, 1952	..	..	1 1 0	By Printing, Stationery and Postage	..	..	4 12 5
Donations .. .. .	..	..	56 10 6	Donation to the National Trust	..	..	52 19 1
			<u>£57 11 6</u>			<u>£57 11 6</u>	

(Sgd.) H. M. EDELSTEN, *Hon. Treasurer.*

We have audited the above Account of Receipts and Payments and certify it to be correct.

*Finbury Circus House,
 Blomfield Street,
 London, E.C.2.
 14th January, 1953.*

(Sgd.) W. B. KEEN & Co., *Chartered Accountants.*

TREASURER'S REPORT

Dr. N. E. Hickin said :

The ten years' service which Mr. Arthur Welti gave to our Society as Treasurer, covering a period of grave anxiety during the war years, will, I am certain, be long remembered. It was therefore with some diffidence that I approached my task in January, 1952, and at the onset I feel I must express my very deep appreciation of Mr. Welti's help in preparing me for the task of Treasurer of this Society. For the three years previous to January, 1952, I served on the Finance and House Committee of the Society, the latter two years being its Chairman, and it is only now that I realize how, and how very kindly, Mr. Welti schooled me for my present task.

I am appreciative also of the great help extended to me by our President. I have always come away from discussing any point of the Society's affairs with Mr. Riley feeling very much strengthened. I am grateful also to the Society's Secretary, Mr. E. B. Britton, for the help and for his critical exchange of views on the Society's affairs which we both enjoy. The Society's Editor, Mr. Balfour-Browne has already written me telling me exactly what is my duty with regard to the provision of yet a larger sum of money for the printing of the Society's publications and I shall do my best to please him. I cannot speak too highly of the work of our Registrar, Miss Evans and her assistants. Miss Evans' great knowledge of the Society's business affairs has made my task very much more simple during this first year, and I extend my very grateful thanks to her.

During the year, quite apart from day-to-day matters of business, some important principles have been debated by the Finance and House Committee, and I would like to thank very much Lt.-Col. Manley, the Chairman of this Committee, and indeed all members of the Finance Committee, for their help during the past year.

This afternoon it was my privilege to present the accounts and Balance Sheet for 1952, audited by W. B. Keen & Co., to your Finance Committee, and thereafter to Council, and I would now like to make some observations on these.

We started the year 1952 with misgivings concerning rising costs, especially of the costs of printing, and it was the very earnest advice of the Retiring Treasurer that we kept as steady a hand as circumstances allowed on House, Office, Meeting, and Library expenses, and it is certainly a very great tribute to our Registrar that we are able to show almost exactly the same figures under these headings for 1952 as were shown for 1951. One of the economies we thought it fit to carry out during 1952 was in regard to binding in the Library, and we carried out binding only of those journals issued in small parts. However, I have to-day recommended that some part of our funds is made available for binding other than those journals. At no time during 1952 did I withhold my recommendation from the purchase of books which had become available. I have been able to make a transfer from our income of £400 to the Repairs Fund, which is somewhat less than that made last year, and it appears to me to be a task for the Finance Committee during 1953 to determine at what level the Repairs Fund should stand.

After meeting all the Society's obligations for the year, and after making two substantial transfers—the one to Repairs Fund, and the other to the Library Fund already mentioned—we have now the sum of £572 to transfer to Capital Reserve Fund, and with this in mind it has been my recommendation to the

Finance Committee this afternoon to allocate a somewhat larger sum to the printing of the Society's *Proceedings*. Both the Secretary and the Editor have impressed me with the importance of reducing the period which must elapse before publication of short papers in the *Proceedings*, so that I feel the Society would be well advised to spend a somewhat larger part of its income on the printing of these publications during 1953.

I feel that I should make some reference to the Fund for printing the *Hand-books for the Identification of British Insects*. I am pleased to say that this child of our Society continues to flourish.

1952 saw the completion of the transfer of those investments and sums of money standing to the credit of the Hugh Main Estate to our Society, and this Fund, made available to us by our great Benefactor, Hugh Main, stands on our Balance Sheet in investments to the value of £12,827. Our Society, and most certainly the present and future Treasurers, are indeed grateful to him.

You will perhaps recollect that a substantial sum has already been allocated from the Hugh Main Fund for the purchase of projection equipment which we now employ. In addition a scheme is at present before Council which it is believed will help younger entomologists to apply for Fellowship of our Society.

Finally, I would like to give thanks to our Auditors, W. B. Keen & Co., for their great interest in the affairs of our Society which they always take, and for their advice which they give and which we almost always take.

The Balance Sheet and Accounts for the year 1952, audited by W. B. Keen & Co., are on the table here for inspection by Fellows if they so wish, and I would be happy to make any necessary explanations at the close of the meeting.

THE PRESIDENT'S ADDRESS

Preliminary Remarks

LADIES AND GENTLEMEN,

Having listened to the reports of your Council and of our Treasurer, and approved them, you will no doubt be expecting me to claim your attention. This, from custom rather than inclination, I now do. First, as is usual, I propose to refer briefly to those of our Fellows who have passed away during the last twelve months.

DAVID JACKSON ATKINSON, born at Knaresborough in June, 1897, was not a frequent attendant at our meetings. He took Forestry at Oxford, and, after a year's entomology under Lefroy, was posted as Forest Officer, later Forest Entomologist and Conservator of Forests, Burma. In 1942 he controlled the civil evacuation of Burma via the Upper Chindwin and Manipur, and then until 1946, when he was appointed Chief Conservator of Forests, Burma, he held a succession of high military and civilian posts concerned with Burmese affairs. On retirement he joined the staff of the Commonwealth Institute of Entomology, specialising in timber beetles, particularly Scolytidae. He died suddenly in harness at the Museum on 27th March, 1952. A charming and versatile man of the world, whose few published works emphasize his loss.

KENNETH GLOYNE BLAIR died on 11th December last at the end of a long period of ill-health bravely borne, within a few days of his seventieth birthday. He joined the Society in 1904, served three times on the Council, and was President in 1940 and 1941. In 1944 he was elected a Special Life Fellow. Throughout these years he was one of the most regular attendants at our meetings, and very seldom failed to contribute something of interest. Though concerned at the Natural History Museum officially only with Coleoptera, he nevertheless ranged over a much wider field, at any rate in so far as the British fauna was concerned. Few men in my experience had such an unerring eye for a species, or for a "good thing"; indeed, his success in the field was uncanny. As a coleopterist he shamed the lepidopterists, the hymenopterists, and at times, even the dipterists. Of his published works, which run to some two hundred titles or more, I need only now remark the width of their interest, for they will be more fully appraised elsewhere. I like to remember him not only as a Fellow of this Society but as a valued colleague and trusted friend, on whose support one could always rely, and as one of the most modest yet most courageous men I have ever known.

Those of us who attended the Amsterdam Congress in 1951 will remember J. B. CORPORAAL as a kind and courtly elder statesman of entomology. Born on 23rd April, 1880, at The Hague, he spent the years 1902 to 1921 in the Dutch East Indies, where he made immense collections of Coleoptera. In 1922 he became keeper of the entomological collections in the Amsterdam Museum, where he remained until 1945. The Clerid beetles attracted him especially, and before long he became recognized as the world specialist on this family. He did not publish extensively, perhaps because the family, as beetle families go, was a small one, but he accumulated an exceptionally fine collection over the years, and produced in 1950 an admirable second edition of the catalogue of the Cleridae published by Junk. He held almost every office in the Dutch Entomological Society, secretary, editor, librarian, etc., at one time or another, and died at Amsterdam on 28th May, 1952.

When he died on 9th February, 1952, in his eighty-seventh year (born 7th June, 1865), Major HEAVER STUART FREMLIN had been a Fellow of this Society for rather more than sixty-three years, yet, though he frequently attended the South London meetings, I cannot remember seeing him often at our own. He was a medical man, and trained at a time when an old sports jacket was still the normal dress of a surgeon in the operating theatre and antiseptics were regarded as nonsense. Perhaps it was this that led him to take up bacteriology and mycology. Entomology was a lifelong hobby, which he indulged wherever his work or travels took him—Kent, Devon, Stornoway in Lewis, Canada or South Africa. He contributed several thoughtful papers on general topics to the various journals at different times.

British entomologists owe a good deal to EDWARD RIVENHALL GOFFE, who died, after a long period of ill-health, on 22nd February last, aged sixty-five. For him entomology seems to have provided a spiritual sheet-anchor in a life of many material vicissitudes. It had been his hobby from youth, given point and edge when, on settling in Southampton, he came into contact with the local band of ardent and able enthusiasts. This led him eventually to cross swords with brother dipterists in particular, and to his evident enjoyment, especially on points of nomenclature. He was also the chief architect of the Society for British Entomology, which under his energetic secretaryship came to serve a most useful purpose and also gave birth to Congresses that many of us have attended. A man of rather rigid views and great determination whom one could always respect even if one sometimes disagreed with him.

CHARLES GRIST, elected in 1905, died in February, 1952, in his eighty-ninth year. By profession a metallurgist he had also been in turn schoolmaster, coach and consulting engineer, had invented the Macrome process for toughening steel, as well as other processes of industrial utility. His varied interests took him to many lands and heightened his natural interest in insects. He published little, but built up a considerable collection of Papilionidae, Pieridae and Nymphalidae designed mainly to illustrate geographical variation. I remember him as a rare visitor to London who could be relied upon to be both entertaining and informative.

MADAME DE HORRACK-FOURNIER belonged to that almost extinct race of wealthy amateurs who for so long advanced the cause of science by their patronage. A person of great charm and very considerable wealth, she seems to have been led to form a collection of butterflies primarily on aesthetic grounds. However, the collection she ultimately formed was unique for the perfection of the material and its wealth of rarities amongst the Lycaenidae, Erycinidae, *Charaxes* and especially *Agrias*. Unfortunately she was not too well served by her curators; had she been better served, much of real scientific interest could have been distilled from the riches she accumulated. The fate of her collection is uncertain; one can but hope that somehow it will be saved for science.

The well-known American entomologist CLARENCE HAMILTON KENNEDY, who died on 6th June, 1952, was born at Rockport, Indiana, in 1879. His entomological writings were concerned largely with the systematics of Dragonflies, particularly those of North and South America, but he also published on ants, birds, fishes, Indian archaeology and general biological topics. The beautiful figures that illustrate his papers he prepared himself, being an able artist as well as a more than competent entomologist. During a long and very active career he held a great variety of posts and won many honours and distinctions, retiring eventually from the Chair of Entomology at Ohio State University in 1949.

HAROLD CECIL KENWAY was born on 18th July, 1872, and died at Durban, S. Africa, where he had been resident many years, on 10th December, 1952. By profession he was a civil engineer. As an amateur lepidopterist he was unusually

successful, especially in collecting the butterflies of the handsome and popular genus *Charaxes*. He was one of the numerous band of correspondents encouraged and helped by Sir Edward Poulton, and he added considerably to our knowledge of the distribution and geographical variation of South African butterflies. The various notes contributed by him to our *Proceedings* show him to have been a keen and observant field naturalist.

ROBERT HOBART KERSEY was born on 26th July, 1890. He belonged to that numerous band of collectors who derive benefit and great pleasure from the innocent pursuit of British Lepidoptera in the field, and from comparing records and experiences with others of like bent. Most of his collecting was done in North Wales, the New Forest, Kent and Sussex. Educated at Eton and Trinity College, Cambridge, he served in the R.A.S.C. in the 1914-18 war, and later took up farming. He died on 10th December, 1951, and his collections were dispersed.

The Reverend JOHN WILLIAM METCALFE was born on 15th January, 1872, and inherited from his father and grandfather their love of entomology and their collections. He was of the generation of Sheldon, South, Robert Adkin and Tutt, all collectors of British butterflies and moths in a true scientific spirit. About the time he joined the Society he became associated with F. N. Pierce, who was engaged in what was then considered a new-fangled and slightly improper investigation of the male genitalia of the British Lepidoptera. This led him into joint authorship of three volumes concerned with the Microlepidoptera, with Pierce, and to the joint publication of several critical papers on the identity of various British Micros. He also discovered in Devon the new Geometer which he described as *Cidaria otregiata*. A quiet, unassuming man, with a wide knowledge of the English countryside, and a dry humour, he passed away on 9th April, 1952.

SIR ARTHUR PICKARD-CAMBRIDGE was the second son of the Reverend Octavius Pickard-Cambridge, the distinguished arachnologist and Rector of Bloxworth. He was born on 20th January, 1873; his mother was a sister of Alfred Russell Wallace. His interest in entomology was life-long and very real, and his knowledge of our subject considerable. However, the world of education, in which he won great distinction, claimed so much of his time and energy that we saw little of him, though he joined the Society so long ago as 1917. He died on 7th February, 1952.

ROBERT GWYNNE CHILDE CRAWSHAY SANDEMAN, who died on 23rd April, 1952, at the early age of fifty-three, had been a Fellow of this Society since 1933. His entomological interests were purely amateur and confined to the British Lepidoptera. His collections were mostly made in the neighbourhood of his home at Crickhowell in Breconshire, and passed to the Natural History Museum. He was well known also as a climber and, especially, as a meteorologist. He maintained a weather station at his home for many years, supplying data that were regularly published, and was particularly interested in snow fall and thunderstorm observation.

GEORGE TALBOT when I first knew him, some forty years ago, was a restless wraith of a man, engaged by the well-known entomological dealer, W. F. H. Rosenberg, to name for him his large stock of unidentified Lepidoptera. Those that were "not in the B.M." were of course the most valuable. A man of few words then. As a result of his experiences in the 1914-18 war, and particularly his association with Bacot at the Lister Institute, he developed rapidly, and soon became curator to the late J. J. Joicey. Established securely at Witley, he was able to give free rein to his systematic pen, and with little restraint upon the acquisition of collections and the employment of collectors, Talbot quickly raised Joicey's Museum and its publications to a high level. On the death of Joicey he turned, undaunted by his changed circumstances, to similar work at the

Natural History Museum, at Oxford, and finally in the Ministry of Food. For very many years he was a familiar figure at our meetings, often exhibiting choice rarities from the remoter parts of the world. He died on 13th April, 1952, in his seventieth year.

Those of us who attended our Meeting in Manchester in July, 1951, will remember the genial alertness of JOHN HENRY WATSON, then in his eighty-sixth year. Born on 1st June, 1866, his life was spent amongst the Lancashire mills, where he became a manufacturer of textiles. He early developed a special interest in silk and silk moths, became a member of the Advisory Board on Sericulture, and published many papers on rearing silk moth larvae, and on new Saturniidae from different parts of the world. His best-known publication is *Wild Silk Moths of the World*, issued by the Manchester School of Technology in 1912. His skill in rearing silk moths in captivity led him to carry out a number of experiments in hybridising different Oriental species, and his collections passed ultimately to the Natural History Museum, through the late Lord Rothschild's Museum at Tring.

I would ask you to rise and stand a moment in memory of these friends and colleagues who are no longer with us.

**Presidential Address to the Fellows of the Royal Entomological Society of London
delivered by Mr. N. D. Riley, C.B.E., to the Annual Meeting on Wednesday,
21st January, 1953.**

I hope you are not expecting from me a discourse on, say, the comparative morphology of the tarsi of the Rhopalocera, incidentally a very interesting subject, or on the philosophical considerations governing policy in an entomological museum. Many of my predecessors in this office could have delighted you with their treatment of such subjects. What I have to say to you to-night is more likely to try your patience than your intelligence.

As entomologists you will all be familiar with that old and attractive but sometimes baseless belief that "like breeds like." It depends on the context. One is tempted as a museum entomologist to extend the theory, by a process of extrapolation, from the insects dealt with to the entomologists who deal with them. It is no new idea. The late Dr. Gahan at the end of his career was astonishingly like a longicorn beetle; the likeness of the late Major Austen to a Tabanid was striking; J. H. Durrant could easily have been taken for the larva of one of the clothes moths which were his particular study. Of course, it takes some years to acquire these characteristics, and they are not yet evident in the younger generation of museum entomologists known to me, though Mr. Tams' capacity to work all night and make himself exceedingly scarce during the day is a clear indication of his association with Noctuid Moths. All this, of course, is merely leading me to a confession, namely, that I was reared on butterflies. Perhaps I had better leave it at that.

Some years ago, when my daughter was very young, I overheard a conversation between her and a young neighbour which ran something like this. "Where does your daddy work?" "My daddy doesn't work; he goes to the Museum." A pretty thought, and perhaps not so wide of the mark as it might seem, for "going to work" has for some people an implication of something distasteful, whereas I fancy that all of us who "go to the Museum" enjoy our work there and consider ourselves very fortunately placed in being paid to follow our natural inclinations. Perhaps we are more fortunate than we know, for it is not so very long ago that a Minister of the Crown expressed astonishment when told that the gentlemen of the British Museum expected to be paid for their services.

Sometimes I have been tempted to try to define those services for which entomologists working in a museum, and particularly in the British Museum, are paid. Reference to such rules as exist shows that "full and accurate catalogues and lists comprising every object" must be made and maintained and that "the rooms must be neat and clean." Further, it is enjoined that they give "the whole of their time . . . to the service of the Museum," and conduct themselves as becomes "persons of honour, integrity and liberality." These brief directions may not seem very precise, except in the matter of cleanliness, yet they do in fact cover everything. Their very generality is their strength. Like our characteristically English constitution they are elastic, not tied to the legal interpretation of a written code, and they trust to the good sense of those for whom they are intended.

Let us try to see how these directions work out. It has been said that the main functions of scientific departments in a Museum are the enlargement, investigation and description of their collections. I would myself say that this savours of putting the cart before the horse. The main function is the care of the collections, and from this all else flows. Collections of objects without data, rotting, mouldering and riddled with *Anthrenus* do not need enlargement and description; they may need investigation, but what they really need is destruction. On the other hand, it is possible to maintain collections of superb material in such utter confusion as to be quite useless for proper Museum purposes. It follows that the

prime necessity is an orderly arrangement that permits of quick reference, and into which existing and new material can be quickly fitted.

It would be perfectly convenient to arrange species alphabetically under genera, the genera being themselves in alphabetic sequence; and it would save a terrible lot of indexing. Or they could be arranged by size; or one might even follow the plan adopted by a mimicry enthusiast who addressed one of our meetings not so long ago, and group them in accordance with their resemblances to lions or tigers, snakes, lizards or alligators. I doubt, however, whether the system advocated by Macleay 120 years ago and based on some mystic property of the numeral 5 would be readily adaptable. His plan was founded on the principle of "series of affinities returning into themselves, and forming as it were circles" and each circle contained five of a kind, orders, genera, species or what you will. However convenient such systems might be, and it must not be forgotten that convenience is an important factor in a Museum, they can hardly be called philosophically satisfying. On the other hand, the natural system that we try to build up has its own drawbacks when it comes to fitting a four-dimensional world into wooden cabinets suitable only for a linear arrangement. We are forced to compromise. We can, on paper, give rein to our wildest imaginings as to the affinities of what we call our species and construct the most attractive phylogenetic trees, but we still have to tuck away our specimens like books in a library and hope and pray that our indexes will not let us down.

It is, of course, that search for the "natural system" that is or should be the constant preoccupation of the museum worker. To him it represents, in a very practical way, the best system upon which he can arrange his specimens and, therefore, care for them. If we define taxonomy as the study of the principles of classification, systematics as the application of those principles, based on the fullest possible study of all available data concerning the nature, origins and relationships of living organisms, then our classification is a kind of end-product of these two studies, and should reflect the findings of all other disciplines engaged in the investigation of living things. We can let argument proceed as to whether evolution results from natural selection, mutations or even the inheritance of acquired characters, taking some sly comfort from the knowledge that, very often, the information available to us enables us to corroborate or even anticipate conclusions, and to see that, as some recent experimental evidence seems to suggest, even Lamarckism may have a place within the theory of natural selection, rather than in opposition to it, depending upon the manner in which an acquired character is defined.

I referred just now to the question of indexing. This is a matter of vital importance in the running of any large entomological museum. It is generally believed that up to the present we have succeeded in describing about 750,000 different kinds of insects. In doing so, it must be admitted, we have wasted a great deal of time and energy and caused ourselves no end of difficulty by describing many of them several times over, creating in the process a quite disgraceful number of synonyms. At a rough guess there are some 2,500,000 names of one kind or another attaching to these species. My observations lead me to believe that, when we have allowed for time off for lunch, tea, shopping, further education, dentist, doctor, weddings, honeymoons and funerals, to say nothing of staff association meetings, it takes about 5 minutes to type a single simple index card. A not very difficult calculation shows that it would take a single person some 16 years to type one index card for each of these names; of course, a married person might do better. When completed, however, such an index is little more than a beginning. What is urgently needed is a subject index. The recollections of one's older colleagues no longer suffice in the search for that odd bit of information nobody can find. We are already repeating work already done,

recording as new observations long since made and checked, simply because there is no quick and certain means of ascertaining whether the information needed has already been recorded or not. It would cost relatively little in terms of labour and money to cure all this, and without some aid in the form of a comprehensive subject index progress is bound to be hindered, and we may gradually be borne down by the weight of our own undigested, un-indexed publications. The mere cost of printing this repetitive information must be quite considerable.

An article contributed to the *New Systematics* before the war set out forcefully the handicaps under which the Museum entomologist labours. I would recommend any entomologist, who cannot understand why all his Collembola from Fiji, his Mycetophilidae from Ruwenzori or even his Braconidae from Brighton can't be named for him by return of post, to read this article carefully before he starts reviling the over-burdened systematist who is the subject of his spleen. It is a sobering thought that the insects collected by Charles Darwin on the voyage of the "Beagle" have not yet all been named. Systematics, like every other branch of entomology, becomes more and more exacting. The kind of professed zoologist who could describe seven subspecies of bear from specimens that proved to be members of a single family, or maintain that the finest specific character in Indian rats was 50 miles, is not now regarded as a leading systematist; but yet when such things are tolerated can one be too hard on a Francis Walker who made a single specimen the type of three distinct species? In view of such foolery can one wonder that a learned judge less than twenty years ago accepted an interest in entomology as evidence of insanity, or at least of feeble-mindedness. No longer is it considered proper, as in the days of W. C. Hewitson, to maintain the status of one's species by consigning the intermediates to the waste-paper basket; these very intermediates are the most fascinating things but at the same time the most exasperating that the Museum entomologist has to deal with; his curatorial instinct rebels at leaving them untidily in the air; he feels that they ought to have nice tidy names like their neighbours. On the other hand, he realizes that to assess their true status may entail experimental work for which he has neither the time nor the facilities, but every inclination.

There is great need for the development of experimental systematics, and no end to the fascinating problems to be tackled. Let us take an apparently well worked group, such as the butterflies, and assume, as I believe to be the case, that a species is a reality, though still defying definition. In the light of recent work on the genetics of the N. American *Colias* it is evident that the whole genus needs investigation along experimental lines, and that our present treatment represents no more than a very rough approximation to the truth. The American genus *Heliconius*, the African *Euphaedra*, the Oriental *Euthalia*, even our pale-arctic Chalk-Hill Blues and their Himalayan cousins, to mention only a very few, are largely incomprehensible in the present state of our knowledge. We call their various forms species, subspecies, varieties, aberrations and so on, but we are really begging the question. The information we need is not yet available, and can only be obtained by experimental techniques.

A good many years ago I was told by an elderly artist that he had seen a butterfly with the three primary colours on its wings. He wanted to see it again, but he could not remember how the colours were arranged, the size, shape or anything else about it. After trying for a long time to find this mysterious insect I offered him my key and suggested he should look for the creature himself. I gently pointed out that the key would give him access to some ten thousand drawers which he could examine at leisure. He said he would come back in the morning, but I have never seen him since. I mention this little incident to indicate the magnitude of the responsibility of an entomologist working in a large museum. When it is remembered that there is hardly one of those drawers that

does not contain some fascinating problem or other, can one wonder that the museum entomologist is sometimes a little disheartened, sometimes a little impatient of interruption perhaps?

A very well known systematist, the late Dr. Tate Regan, used to maintain that nobody could cover satisfactorily a group of more than 10,000 species. That was some 25 years ago. Since then so many fresh aids and refinements have been introduced that, in my belief, half that number of species is now the most that anyone could critically handle. On that basis an entomological museum covering only the insects so far described should have a staff of 150 scientific men. We have specimens of some thousands of other insects not yet described and named, and we are pretty certain that tens of thousands still await discovery. At least 200 men would really be needed to give full coverage. This is, of course, absurd to the layman, and in some degree fallacious, because it takes no account of other similar museums and their staffs. Yet how can one ensure that the operations of such parallel organizations do not overlap; and is it altogether desirable to avoid overlap with its consequent elimination of competitive ideas? Naturally, we do not want to see a recrudescence of the competition of Napoleonic times, which resulted in French, German, Austrian, British and sometimes Italian entomologists too all describing the same insects at the same time and naming them independently. Nor do we want to return to that "mihi" cult, a manifestation of the same spirit, and now happily almost a thing of the past, though I must confess to a certain unhappiness on those rare occasions when I have seen my own work published, unacknowledged, by another. Co-operation is what is needed by the museum entomologist; instead of criticizing him for not describing all your new species, do it for him. If he is a wise man he will be only too thankful. And if you name a few of them after him, so much the better. He may only grudgingly name them after you because you have deflected him from work that he knows to be of more importance. His task should be to provide the monographic revisions of large groups of insects, the tools for you to use, not to describe one insect here, another there, however much this may contribute to your glorification or to the elucidation of the origins of the fauna of some remote island or mountain top. It is admittedly hard on him, for very often he would much sooner be speculating as to how a S. American butterfly got to Tristan da Cunha, or why *Vanessa indica* occurs in the Himalayas and Madeira, but nowhere else; but both he and you will be the better able to do this when those monographic revisions are published.

There, of course, is the rub. How, under present conditions, are museum entomologists to produce those comprehensive revisions that we all need so badly? Here and there we see it being done; an enthusiast with a small group of a few hundred species can achieve it from time to time, but more often it is the free-lance, the entomologist who is free to please himself what he does, who gives us the monographs and catalogues so sorely needed. When larger groups are concerned the situation is very different. The collection of Hesperidae in the Natural History Museum contains some hundreds of thousands of specimens. It has taken one specialist twenty years, working eight or more hours a day uninterruptedly, to reduce this mass to order and to publish catalogues (still not yet complete) of the whole. A single subfamily of the Geometridae, the Ennominae, is represented by some 440,000 specimens, including over 6000 type-specimens, and has taken ten years so far to arrange; only about three-quarters of the work is done, and critical revision has hardly begun. It is manifestly impossible for the museum entomologist confronted with collections of such magnitude to compile and maintain detailed lists. It is not even possible for him to be sure that all his specimens are even approximately in their right places; the marvel is that so many are. The museum entomologist is indeed in a quandary. What is he to do? Clearly the only answer is to do well what he can

in the way of revising selected groups, and to ensure that the remaining 70 to 90 per cent. are preserved for similar treatment when opportunity occurs. It is unfortunate if your conundrums all lie within that 70 to 90 per cent. ; but if you force your specialist to worry about that, he and you cease to advance ; you are only treading water.

Faced with such odds, a sense of proportion, next to a sense of humour, is one of the most necessary attributes of a museum entomologist. It does not matter if his specimens outnumber the sands of the seas or his species the stars of the firmament so long as he can laugh at the idea of describing and cataloguing them all. The other way, as I have seen, lies failure at least, sometimes madness. W. F. Kirby firmly believed in the " little people," and one had to be very careful, when entering his room, not to disturb them ; the entomologist whose place I took forty years ago died in an asylum. Other men, from the same anxiety, have lowered their standards, and left behind them monuments of printer's ink and paper much of which we had been the better without.

In his day-to-day relations with the general public, the entomologist working in a national museum is only doubtfully better placed than any other. He may be worse off, for he is part of a bigger target. He has to cope with the earnest youngsters who expect to be told " all about the ant " on a postcard ; the lunatic who, having been given the names of caterpillars that eat cabbage, then leeringly wants the names of all those that don't, and is mercifully removed by his keeper ; the pathetic housewife who complains that insects have eaten the glaze off her sink, the bristles off her yard broom, and, sweeping off a wig, the hair off her head, all in a single night ; the gentleman who wants a complete list of the weevils of Ruritania by return of post, or the present addresses of Linnaeus, Fabricius, Godart, de Geer and half a dozen other 18th century entomologists. Such incidents may be, and often are, difficult to bear at the time—I, for one, would not be without them, for they serve to keep one's feet on the ground, and prick those bubbles of esoteric exaltation that are prone otherwise to burst in stranger ways.

I have tried to give you a few glimpses of life in an entomological museum, seen from the inside. Its keynote is a constant but enjoyable struggle to achieve the impossible. From the outside it may look very different, for it shows few of those signs of urgency that mark the business world, if it seems less busy to you as visitors, I ask you to remember that your visits and our work cannot have simultaneous attention.

Before laying down my office I take this welcome opportunity of thanking once again the honorary officers and the Society's staff, kept firmly under control by our Registrar, for the generous and unfailing support they have given me. They make life for the President so easy ; he is prone to forget he has any responsibilities till, suddenly it seems, he finds himself in this Chair. We can congratulate ourselves on this team, and look forward I am sure, in this Coronation year, to still further progress in the Society's affairs under the presidency of Professor Buxton.

Ladies and gentlemen, may I thank you once again, not only for having me as your President for two whole years, but also for rendering those years so very enjoyable.

BENEFACCTIONS.

List of Donations of the amount or value of Twenty pounds and upwards.

	1852.
Miss BROMFIELD, 67 volumes from the library of W. A. Bromfield.	
	1861.
H. T. STAINTON, towards cost of alterations of premises, £25.	
	1864.
J. W. DUNNING, £123 5s.*	
	1867.
The same, towards cost of publications, £105.	
	1868.
H. J. FUST, towards the cost of his paper on Geographical Distribution, £25.	
The ROYAL SOCIETY, for the same, £25.	
	1869.
J. W. DUNNING, £50.	
W. W. SAUNDERS, cost of drawing and engraving 24 plates for Pascoe's "Longicornia Malayana."	
	1870.
J. W. DUNNING, £20.	
The same, the entire stock of eight vols. of the Transactions.	
	1872.
The same, towards cost of publications, £50.	
	1875.
The same, cost of removal of Library and new book-cases, £99 17s. 4d.	
	1876.
The same, towards cost of publications, £150.	
	1879.
H. T. STAINTON, £20 10s. 6d.	
	1880.
The same, £20.	
	1881.
J. W. DUNNING, towards cost of publications, £40.	
H. T. STAINTON, for the same, £25.	
	1882.
The same, £30.	
	1883.
The same, £35.	

* It has not always been possible to find the exact purpose for which the earlier money gifts were intended, but they appear to have been usually in support of the publications.

1884.

J. W. DUNNING, £50.

H. T. STANTON, £40.

W. B. SPENCE, his late father's library.

1885.

J. W. DUNNING, £35.

The same, the whole cost of the Society's Charter.

1893.

The same, towards cost of publishing the Library Catalogue, £25.

1894.

The same, £45.

The Misses SWAN, £250 for the "Westwood Bequest," the interest to be used for plates in the Transactions.

F. D. GODMAN (in this and subsequent years), "Biologia Centrali-Americana."

1898.

MRS. STANTON, about 800 volumes and pamphlets from H. T. Stanton's Library.

1899.

S. STEVENS, Legacy, £100.

1902.

G. W. PALMER, M.P., towards cost of printing G. A. K. Marshall's paper on the Bionomics of African Insects, £30.

Prof. E. B. POULTON, towards cost of plates, £65.

1903.

H. J. ELWES, cost of plates to illustrate his paper on the Butterflies of Chile, £36 18s. 2d.

F. D. GODMAN, cost of plates to illustrate his paper on Central and S. American Erycinidae.

1904.

H. L. L. FELTHAM, towards cost of plates for R. Trimen's paper on S. African Lepidoptera, £20.

1906.

The same, towards cost of plates for R. Trimen's paper on African Lepidoptera, £20.

1908.

E. A. ELLIOTT (in this and subsequent years), Wytzman's "Genera Insectorum."

1909.

CH. OBERTHÜR (in this and subsequent years), his "Lépidopterologie comparée."

1910.

Dr. T. A. CHAPMAN, towards cost of plates for his papers on Life-histories of Lepidoptera, £25.

1911.

Sir G. KENRICK, Bart., cost of plates for his paper on Butterflies of Dutch New Guinea, £54.

1912.

Dr. T. A. CHAPMAN, cost of plates for his papers on Life-histories of Lepidoptera, £35 6s. 5d.

1913.

The ROYAL SOCIETY, towards the publication of D. Sharp's paper on the Genitalia of Coleoptera, £60.

1914.

F. D. GODMAN, cost of plates for G. C. Champion's papers on Mexican and Central American Coleoptera, £22 7s. 6d.

G. T. BETHUNE-BAKER, cost of 12 plates illustrating his Presidential Address.

1915.

- J. J. JOICEY, cost of plates for his papers on Lepidoptera from Dutch New Guinea, £82 11s.
 Dr. G. B. LONGSTAFF, cost of plates for Dr. Dixey's paper on New Pierines, £32.

1916.

- Dr. T. A. CHAPMAN, for plates, £68 7s. 3d.

1917.

- Mrs. MELDOLA, for books for the Library, £31 10s.
 E. E. GREEN, large binocular microscope.

1919.

- Dr. T. A. CHAPMAN, F.R.S., cost of plates to illustrate his papers, £56 19s. 3d.

1920.

Donations in aid of the purchase of 41, Queen's Gate—

- Dr. G. B. LONGSTAFF, £1000.
 The Honble. N. C. ROTHSCHILD, £500.
 Dr. H. ELTRINGHAM, Sir G. H. KENRICK, The Rev. F. D. MORICE, W. G. SHELDON each £100.
 R. ADKIN, G. T. BETHUNE-BAKER, Dr. T. A. CHAPMAN, W. M. CHRISTY, H. MASSEY, Prof. E. B. POULTON, each £50.
 B. H. CRABTREE, E. E. GREEN, Dr. G. A. K. MARSHALL, G. A. J. ROTHNEY, each £25.
 H. E. ANDREWES, £21.
 H. J. ELWES, E. B. NEVISON, G. T. PORRITT, O. WHITTAKER, each £20.
 Dame ALICE GODMAN, book-shelves and fittings for the Library.
 J. J. JOICEY, in aid of the furnishing of 41, Queen's Gate, £100.
 Dr. T. A. CHAPMAN, F.R.S., cost of plates to illustrate his paper, £30.

1921.

Donations in aid of the purchase of 41, Queen's Gate—

- The Rt. Hon. LORD ROTHSCHILD, £105.
 W. M. CHRISTY, £50, making with a similar donation in 1920, £100 in all.
 W. G. F. NELSON, £63, reduction of solicitor's charges.
 W. J. KAYE, £50.
 W. SCHMASSMAN, £50.
 R. ADKIN, £40, cancellation of debentures drawn.
 E. C. BEDWELL, £28 7s. 6d., reduction of surveyor's charges.
 H. WILLOUGHBY ELLIS, £26 5s.
 Lt.-Col. R. S. WILSON, £25.
 H. ST. JOHN K. DONISTHORPE, £21.
 Miss E. F. CHAWNER, £20.
 Sir JOHN T. D. LLEWELYN, Bart., £20.
 K. J. MORTON, £20.
 J. J. JOICEY, Lantern and Stand for the Meeting Room.
 Dr. T. A. CHAPMAN, F.R.S., £29 5s., to illustrate his paper in the Transactions, 1920.
 The Rt. Hon. LORD ROTHSCHILD, £22 15s. 4d., cost of plates in the Proceedings for 1920.
 JESUS COLLEGE, OXFORD, through Prof. E. B. POULTON, F.R.S., £100.

1922.

Donations in aid of the purchase of 41, Queen's Gate—

- The Misses CHAPMAN, in memory of their brother, the late Dr. T. A. Chapman, F.R.S., £500.
 G. A. J. ROTHNEY (bequest), £150.
 R. ADKIN, £70, cancellation of debentures drawn.
 E. E. GREEN, £25 (making £50 in all).
 W. H. B. FLETCHER, £25.
 Sir A. BUCHAN-HEPBURN, Bart., £20.
 E. W. ADAIR, £20.
 The Misses CHAPMAN, two bookcases.

1923.

Donations in aid of the purchase of 41, Queen's Gate—

- The Honble. N. C. ROTHSCHILD (bequest), £1000.
 R. ADKIN, £90, cancellation of debentures drawn (making £200 in all).
 A. C. F. MORGAN, £20.
 H. J. TURNER, £20.

1924.

Donations in aid of the purchase of 41, Queen's Gate—

E. D. BOSTOCK, £21.

Miss M. E. FOUNTAINE, £20.

H. H. C. J. DRUCE (bequest), £1000, interest to be spent on new books.

Prof. E. B. POULTON, F.R.S., authorised contribution from the Fund for promoting the study of organic and social evolution, presented to the University of Oxford by Professor J. Mark Baldwin, £130 15s. 4d.

JESUS COLLEGE, OXFORD, through Prof. E. B. Poulton, F.R.S., £125.

H. WILLOUGHBY ELLIS, contribution towards new electric light installation at 41, Queen's Gate, £50.

1925.

A. H. JONES (bequest), £100.

G. T. BETHUNE-BAKER, £30, towards the cost of the plates in his paper.

E. A. ELLIOTT, in continuation of his practice since 1908, Wytsman's "Genera Insectorum," amounting to a total value of £225.

THE ROYAL SOCIETY, £100, towards the cost of Mr. H. S. Pruthi's paper.

1926.

THE ROYAL SOCIETY, £150, towards the cost of Mr. Warren's paper.

1927.

Rev. F. D. MORICE (bequest), £200.

Prof. E. B. POULTON, F.R.S., authorised contribution from the Fund for promoting the study of organic and social evolution, presented to the University of Oxford by Professor J. Mark Baldwin, £40 16s.

1928.

R. W. LLOYD, the entire cost of the panelling and ceiling in the new Meeting Room, together with the Presidential Desk and Chair.

Col. J. W. YERBURY (bequest), £50.

1929.

THE EMPIRE MARKETING BOARD, £96 8s. 5d., the entire cost of Mr. B. P. Uvarov's paper.

Prof. E. B. POULTON, F.R.S., authorised contribution from the Fund for promoting the study of organic and social evolution, presented to the University of Oxford by Professor J. Mark Baldwin, £85 11s.

THE ROYAL SOCIETY, £90, towards the cost of Mr. F. W. Edwards' paper.

1930.

R. ADKIN, the entire cost of the Epidiascope and screen.

Dr. K. JORDAN, £50 donation in aid of building the new Meeting Room.

H. WILLOUGHBY ELLIS, £50 donation in aid of building the new Meeting Room.

Dr. R. STEWART MACDOUGALL, £110, being the cost of a bookcase and table for the Library, in memory of his wife.

JESUS COLLEGE, OXFORD, through Professor E. B. Poulton, F.R.S., £25.

Mdme. A. DE HORRACK-FOURNIER, cost of plate illustrating Mr. Lathy's paper, £20 5s.

THE TRUSTEES OF THE CARNEGIE (U.K.) FUND, £500 for the purchase of books for the Library.

Mrs. EATON, a selection of books from the Library of her husband.

E. A. ELLIOTT, in continuation of his practice since 1908, Wytsman's "Genera Insectorum."

P. I. LATHY, "Thèses entomologiques," copy No. 2, including a proof set of the plates uncoloured.

1931.

EMPIRE MARKETING BOARD, towards the cost of Mr. B. P. Uvarov's paper, £231.

Prof. E. B. POULTON, F.R.S., authorised contribution from the Fund for promoting the study of organic and social evolution, presented to the University of Oxford by Professor J. Mark Baldwin, £110.

JESUS COLLEGE, OXFORD, through Prof. E. B. Poulton, F.R.S., £20.

BOARD OF THE CARNEGIE FUND IN SOUTH AFRICA, the entire cost of the plates illustrating Prof. A. J. T. Janse's paper.

1932.

Prof. R. MELDOLA (bequest), £450.

Prof. E. B. POULTON, F.R.S., authorised contribution from the Fund for promoting the study of organic and social evolution, presented to the University of Oxford by Prof. J. Mark Baldwin, £50

JESUS COLLEGE, OXFORD, through Prof. E. B. Poulton, F.R.S., £30.

Dr. F. MORTON JONES, cost of plate illustrating his paper, £20 10s.

Donations to Centenary Fund—

Fleet-Paymaster T. BAINBRIGGE FLETCHER, R.N., £35.

C. W. Mackworth PRAED, £26 5s.

R. ADKIN. £25.

Prof. W. A. F. BALFOUR-BROWNE, F.R.S.E., £20.

Dr. H. ELTRINGHAM, F.R.S., £20.

1933.

Donations to Centenary Fund—

Prof. E. B. POULTON, F.R.S., £100.

Prof. W. A. F. BALFOUR-BROWNE, F.R.S.E., £20, making with a similar donation in 1932, £40 in all.

H. WILLOUGHBY ELLIS, £20.

LORD ROTHSCHILD, F.R.S., £20.

EMPIRE MARKETING BOARD, towards the cost of the paper by O. W. Richards and W. S. Thomson, £75.

THE HIGH COMMISSIONER FOR INDIA, towards the cost of the paper by U.S. Sharga, £30.

1934.

THE ROYAL SOCIETY, £75, towards the cost of Dr. O. W. Richards' paper.

1935.

R. ADKIN (bequest), £250, and a selection of the books from his library.

R. W. LLOYD, the entire cost of Jacob Huebner's collection of manuscripts, plates and drawings.

C. B. HOLMAN-HUNT (bequest), £100, for the Library.

THE ROYAL SOCIETY, £70, towards the cost of Prof. G. D. Hale Carpenter's paper.

Fleet-Paymaster T. BAINBRIGGE FLETCHER, R.N., a selection of the books from his library.

H. G. CHAMPION, a selection of books from the library of the late G. C. Champion.

1936.

THE TRUSTEES OF THE HERBERT SPENCER ESTATE, £1241, being one-twelfth part of the residuary estate of Herbert Spencer.

THE GOVERNMENT OF TANGANYIKA TERRITORY, £330, towards the cost of Mr. C. F. M. Swynnerton's paper.

Miss C. LONGFIELD, £33 15s., being the cost of her paper

THE CARNEGIE TRUST FOR THE UNIVERSITIES OF SCOTLAND, £23 13s., towards the cost of Mr. R. Carrick's paper.

1937.

THE ROYAL SOCIETY, £100, towards the cost of Mr. Francis Hemming's book on *Jacob Hübner*.

1938.

THE ROYAL SOCIETY, £72, towards the cost of Prof. C. E. Mickel's paper.

1939.

W. S. GILLES (bequest), £2000.

J. J. WALKER (bequest), £100.

R. W. LLOYD, £20, towards the cost of purchase of a set of the *Journal of the Asiatic Society of Bengal*.

Dr. R. VERITY, the cost of 8 plates illustrating his paper.

THE IMPERIAL INSTITUTE OF ENTOMOLOGY, Locust Research Fund, £100, towards the cost of Dr. J. S. Kennedy's paper.

THE ROYAL SOCIETY, £80, towards the cost of Dr. O. W. Richards' paper.

1940.

W. S. GILLES (bequest), £1600.

1941.

- Dr. L. G. HIGGINS, £200, towards the cost of his paper.
 W. S. GILLES (bequest), £101 11s. 4d.
 Miss M. E. FOUNTAINE (bequest), £100.
 Miss JANET RIDDELL, £50, towards the cost of her paper.
 THE ROYAL SOCIETY (on behalf of the Rockefeller Foundation Gift in aid of Scientific Publications), £50.

1942.

- THE ROYAL SOCIETY, £100, from the Government Publications Fund towards the cost of Dr. C. B. Williams' paper.
 THE ROYAL SOCIETY, £100, from the Rockefeller Foundation Gift in aid of Scientific Publications.
 The Estate of the late D. S. WILKINSON, £200, towards the cost of publishing Lieut. Wilkinson's paper on *Apanteles*.

1943.

- THE ROYAL SOCIETY, £100, from the Government Publications Fund.
 THE ROYAL SOCIETY, £200, from the Rockefeller Foundation Gift in aid of Scientific Publications.

1944.

- THE ROYAL SOCIETY, £250, from the Rockefeller Foundation Gift in aid of Scientific Publications.
 THE EGYPTIAN GOVERNMENT, £115, towards the cost of Dr. A. A. G. Hassan's paper.
 Prof. G. D. HALE CARPENTER, £50, from the E. B. Poulton Fund towards the cost of the paper by himself and Dr. B. M. Hobby.

1945.

- THE ROYAL SOCIETY, £330, from the Government Grant in aid of Scientific Publications.
 THE ROYAL SOCIETY, £250, from the Rockefeller Foundation Gift in aid of Scientific Publications.

1946.

- THE ROYAL SOCIETY, £240, from the Government Grant in aid of Scientific Publications.
 Prof. T. D. A. COCKERELL, £200, donation to Library Catalogue Fund.
 Mr. H. E. ANDREWES, his entire library of works on Coleoptera.

1947.

- THE ROYAL SOCIETY, £600, from the Government Grant in aid of Scientific Publications towards the cost of the *Handbooks on British Insects*.
 TRINITY COLLEGE, DUBLIN, £50, towards the cost of Dr. B. P. Beirne's paper.
 THE ROYAL SOCIETY, £364 3s. 6d., from the Government Grant in aid of Scientific Publications, being the cost of Dr. J. W. Evans' paper.

1948.

- THE ROYAL SOCIETY, £366, from the Government Grant in Aid of Scientific Publications.
 HUGH MAIN (bequest), £100.
 AN ANONYMOUS FELLOW, £52 10s. towards the purchase of books for the Library.
 THE ANTI-LOCUST RESEARCH CENTRE, £50, towards the cost of Dr. B. P. Uvarov's paper.
 THE EAST AFRICAN TSETSE RESEARCH ORGANISATION, £21 13s. 8d., being the cost of the plates illustrating Dr. C. H. N. Jackson's paper in *Proceedings Series A*.
 C. J. WAINWRIGHT (bequest), a first selection of the books from his library and the whole of his large collection of reprints.

1949

- THE ROYAL SOCIETY, £250, from the Government Grant in aid of Scientific Publications towards the cost of the Rev. C. E. Tottenham's paper.
 THE E. B. POULTON FUND FOR THE STUDY OF EVOLUTION, £200, towards the cost of the coloured plates illustrating Professor G. D. Hale Carpenter's paper.
 Mr. R. W. LLOYD, £116 7s. 9d., being the balance of the cost of the coloured plates illustrating the above paper.
 Dr. F. L. VANDERPLANK, £52 10s. 4d., being the cost of the coloured and half-tone plates illustrating his papers in *Proceedings Series B*.

1950.

THE ROYAL SOCIETY, £250, from the Government Grant in aid of Scientific Publications towards the cost of the *Handbooks on British Insects*.

THE ROYAL SOCIETY, £350, from the Government Grant in aid of Scientific Publications towards the cost of the paper by Dr. O. W. and Dr. M. J. Richards.

HUGH MAIN (bequest), £958 11s. 2d.

£400 0s. 0d. 3 per cent. Savings Bonds, 1960/1970.

£2307 7s. 4d. 3 per cent British Electricity Bonds, 1968/1973.

The Estate of the late W. S. GILLES (bequest), £80 7s. 5d.

MR. T. H. E. JACKSON, £50 5s. 6d., being the cost of the coloured plate illustrating the paper by himself and Professor G. D. Hale Carpenter in *Proceedings Series B*.

MR. C. J. BROOKS, £50, towards the cost of his paper.

H. J. TURNER (bequest), a first selection of the books from his library and the whole of his large collection of reprints.

1951.

THE ROYAL SOCIETY, £550, from the Government Grant in Aid of Scientific Publications.

THE SUDAN GOVERNMENT, £100, towards the cost of the paper by Dr. R. Kirk and Mr. D. J. Lewis.

THE COLONIAL DEVELOPMENT AND WELFARE FUND, £55 3s. 4d., towards the cost of the above paper.

THE UNIVERSITY OF GLASGOW, £50, towards the cost of Dr. J. W. H. Lawson's paper.

MR. T. H. E. JACKSON, £48 15s. 5d., being the cost of the coloured plate illustrating his paper in *Proceedings Series B*.

1952.

THE ROYAL SOCIETY, £225, from the Government Grant-in-Aid of Scientific Publications.

HUGH MAIN (Bequest), £339 3s. 4d.

£5312 3s. 7d. British Transport 3 per cent. Stock, 1978-1988.

£5000 0s. 0d. British Electricity 3 per cent. Stock, 1974-1977.

£1692 12s. 8d. British Electricity 3 per cent. Stock, 1968-1973.

ERRATA.

Page 46, line 7 from bottom of page, for "breathing" read "breeding."

Page 46, line 4 from bottom of page, delete the word "continued."

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